

Sample Plan of Study

Computational Atmospheric Sciences Option

1st Year - Freshman Year

| Fall Semester | | Spring Semester | |
|--|-----------|--|--------------|
| MATH 113 Analytic Geom and Calc I ¹ | 4 | MATH 114 Analytic Geom and Calc II | 4 |
| CLIM 111 Intro Fund Atmos Sci | 3 | CS 112 Intro Comp Program ² or CDS 130 Computing for Scientists | 3-4 |
| CLIM 112 Intro Fund Atmos Sci Lab | 1 | CLIM 102 Intro Global Clim Change Sci | 4 |
| COMM 101 Interpersonal and Group Interact | 3 | ENGH 101 Composition | 3 |
| SOCI 101 Introductory Sociology | 3 | | |
| UNIV 100 Introduction to Mason | 2 | | |
| Total Credits | 16 | Total Credits | 14-15 |

¹ A placement test is required (visit http://math.gmu.edu/placement_test.php or email Catherine Sausville at csausvil@gmu.edu)

² An additional information technology ethics course must be taken in order to completely fulfill the Mason Core: Information Technology requirement. Recommended courses include either CDS 151 or CS 105.

2nd Year - Sophomore Year

| Fall Semester | | Spring Semester | |
|--|-----------|--|-----------|
| MATH 213 Analytic Geom and Calc III | 3 | CHEM 211 General Chemistry I and CHEM 213 General Chemistry I Lab | 4 |
| PHYS 160 University Physics I | 3 | PHYS 260 University Physics II | 3 |
| PHYS 161 University Physics I Lab | 1 | PHYS 261 University Physics II Lab | 1 |
| CLIM 301 Weather Analysis and Prediction | 4 | CLIM Elective ⁴ | 3 |
| ENGH 302 Advanced Composition | 3 | STAT 250 Introductory Statistics | 3 |
| CS 105 Computer Ethics and Society ³ or CDS 151 Data Ethics in an Inform Society ³ | 1 | Literature requirement | 3 |
| Total Credits | 15 | Total Credits | 17 |

³Not required if CDS 130 was taken

⁴One of the following: CLIM 314 Severe and Extreme Weather, GGS 312 Physical Climatology, CLIM 456 Introduction to Atmospheric Radiation

3rd Year - Junior Year

| Fall Semester | | Spring Semester | |
|--|-----------|--|-----------|
| CLIM 429 Atmospheric Thermodynamics | 3 | CLIM 411 Atmospheric Dynamics | 3 |
| MATH 214 Elementary Differential Equations | 3 | HIST requirement | 3 |
| Course from Option ⁵ | 3 | CDS 302 Scientific Data and Databases ⁷ | 3 |
| CLIM elective ⁶ | 3 | CLIM elective ⁴ | 3 |
| Arts requirement | 3 | | |
| Total Credits | 15 | | 12 |

⁵One of the following: CDS 251 Introduction to Scientific Programming, CDS 301 Scientific Information and Data Visualization, CDS 303 Scientific Data Mining

⁶One of the following: CLIM 319 Air Pollution, CLIM 412 Physical Oceanography

⁷Not required if any of CDS options was taken in the fall

4th Year - Senior Year

| Fall Semester | | Spring Semester | |
|--|--------------|--|--------------|
| GEOL 420 Earth Science and Policy ⁸ | 3 | CLIM 440 Climate Dynamics | 3 |
| CLIM 470 Numerical Weather Prediction | 3 | PHYS 475 Atmospheric Physics | 3 |
| Global Understanding requirement | 3 | CLIM 408 Senior Research ¹⁰ | 3 |
| CLIM Elective ^{6,9} | 3-6 | CLIM Elective ^{4,9} | 3-6 |
| Total Credits | 12-15 | Total Credits | 12-15 |

⁸Mason Core: Synthesis course

⁹CLIM 409 Research Internship

¹⁰ Writing Intensive (WI) course in the major